

# LOW VOLTAGE CURRENT REFERENCE CIRCUITS

## Abstract

In a first aspect, a first current reference circuit is provided that includes (1) a first n-channel field effect transistor (NFET) having a gate and a drain that are coupled together; and (2) a second NFET having a floating body. In a second aspect, a second current reference circuit is provided that includes (1) a first n-channel field effect transistor (NFET) having a gate and a drain that are coupled together; and (2) a second NFET having a floating body. In the second current reference circuit, the first and second NFETs are configured so as to generate a reference current at a supply voltage of not more than about 0.5 volts. Numerous other aspects are provided.